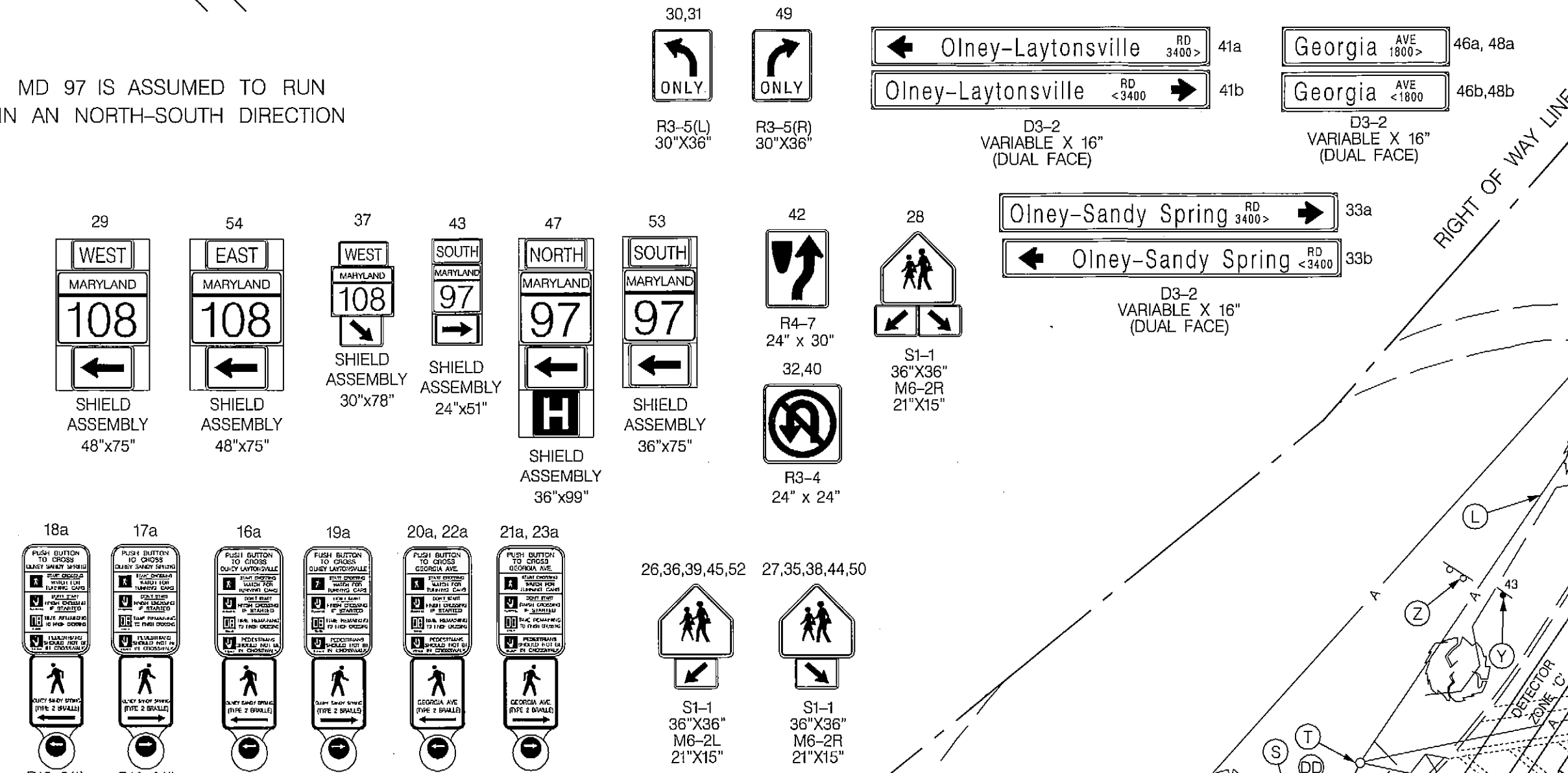
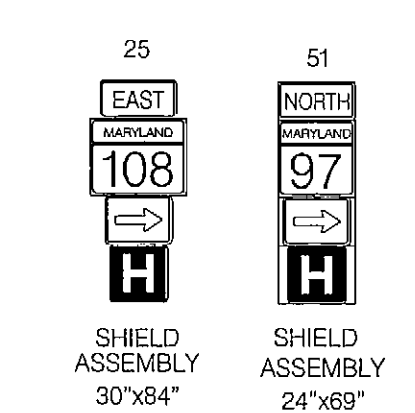


MD 97 IS ASSUMED TO RUN
IN AN NORTH-SOUTH DIRECTION

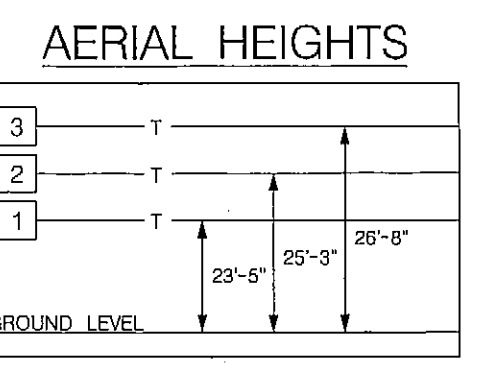
PROPOSED SIGNS



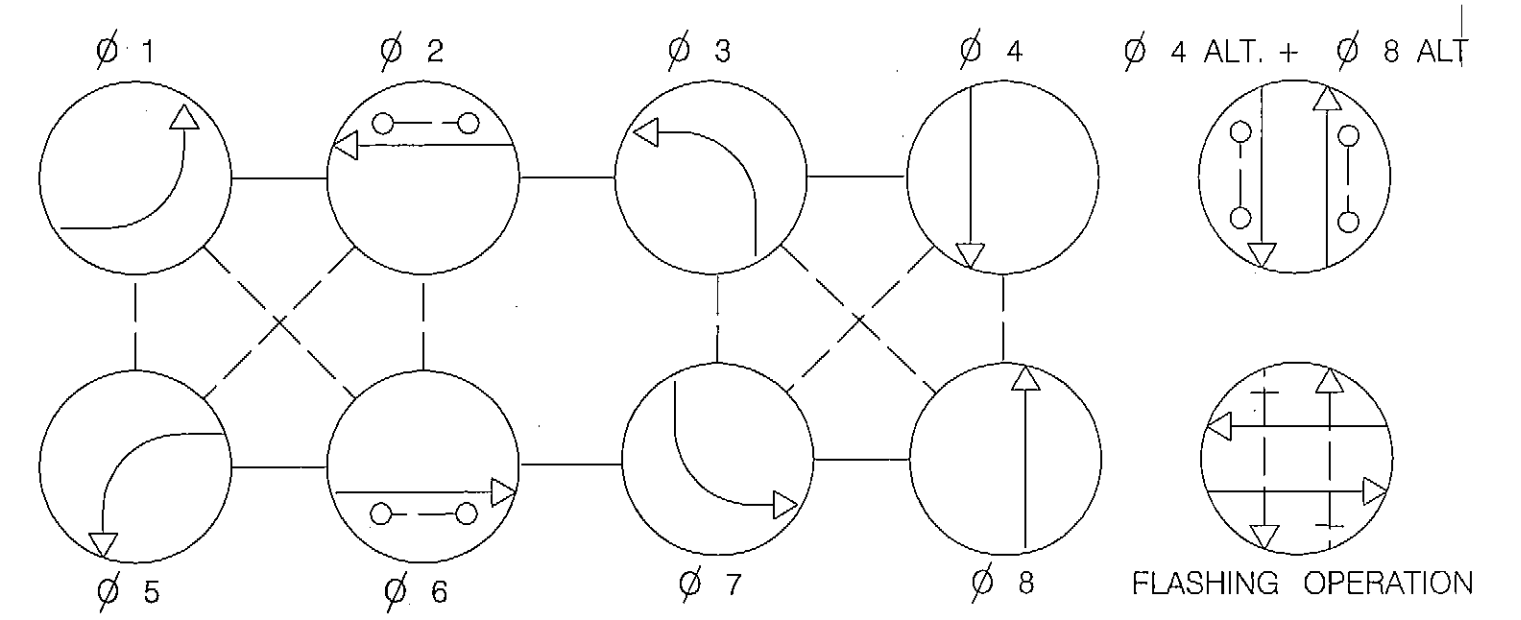
EXISTING SIGNS



LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES	
AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
WATER	W
CABLE TV	TV

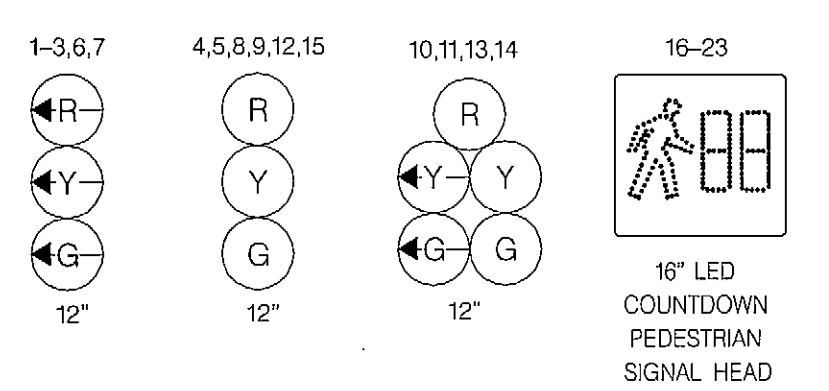


NEMA PHASING

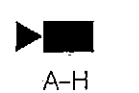


PHASING NOTES:
1.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2.) PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

PROPOSED L.E.D. SIGNAL HEADS



PROPOSED VIDEO DETECTION CAMERA



CONSTRUCTION DETAILS

- INSTALL 27 FT. MAST ARM POLE WITH 70 FT. MAST ARM, 1-3 IN. WEATHERHEAD AT POLE TOP FOR 1/2 C. CABLE, SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, AND SPLICE CABINET (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS)
- INSTALL 27 FT. MAST ARM POLE WITH 50 FT. MAST ARM, SIGNAL HEADS, 10 FT. LIGHTING ARM, SIGNS, VIDEO DETECTION CAMERAS, AND PUSHBUTTON CUT, CLEAN, GALVANIZE, AND CAP MAST ARM AS SHOWN (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS)
- INSTALL 27 FT. MAST ARM POLE WITH 50 FT. MAST ARM, 1-3 IN. WEATHERHEAD AT POLE TOP FOR 1/2 C. CABLE, SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, PEDESTRIAN SIGNAL, AND PUSHBUTTON (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS)
- INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: INSTALL 2-2 IN. AND 4-4 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS)
- INSTALL 2-4 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT - TRENCHED
- REMOVE MEDIAN NOSE AND ADJUST GEOMETRICS AS SHOWN (SEE SHEET 3 OF 3)
- INSTALL 2-4 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUITS - SLOTTED (IN SAME TRENCH)
- INSTALL ELECTRICAL HANDHOLE
- REMOVE EXISTING HANDHOLE
- USE EXISTING HANDHOLE
- REMOVE EXISTING OVERHEAD INTERCONNECT CABLE FROM SIGNAL POLE TO NEAREST SPLICE CABINET
- INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (WITH HATCHING)
- INSTALL 2-5 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
- REMOVE EXISTING PAVEMENT MARKING LINE
- INSTALL METERED SERVICE PEDESTAL EMBEDDED
- INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
- INSTALL 10' BREAKAWAY PEDESTAL POLE WITH MODIFIED BASE, PEDESTRIAN SIGNAL(S), PUSHBUTTON AND SIGN (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND)
- REMOVE EXISTING SIGNAL POLE, FOUNDATION BELOW FINAL GRADE, AND ALL EQUIPMENT ATTACHED
- INSTALL 2-4 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT - SLOTTED
- REMOVE EXISTING CONTROLLER, CABINET, AND FOUNDATION
- INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT - TRENCHED
- INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT - TRENCHED (STUB-UP AT BASE OF UTILITY POLE)
- INSTALL PROPOSED SIGN ON GROUND MOUNTED 4" x 4" WOOD POST APPROX. 200 FT. FROM STOP LINE
- REMOVE EXISTING GROUND MOUNTED SIGN
- DISCONNECT EXISTING OVERHEAD 1/2 C. CABLE FROM EXISTING SPLICE CABINET AND RE-ROUTE TO PROPOSED SPLICE CABINET
- INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL CONDUIT - TRENCHED
- INSTALL 10' BREAKAWAY PEDESTAL POLE WITH MODIFIED BASE, PUSHBUTTON AND SIGN (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND)
- INSTALL WOOD SUPPORT 4" x 4" WITH GROUND MOUNTED SIGN AS SHOWN
- ATTACH OVERHEAD INTERCONNECT CABLE TO UTILITY POLE
- INSTALL INTERCONNECT CABLE THRU WEATHERHEAD TO SPLICE CABINET ON SIGNAL POLE
- REMOVE EXISTING S1-1 SIGN FROM POST

GENERAL NOTES

- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT BEING REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE WORK.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON TO THE FACE OF THE PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATION UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- ALL ACCESSIBLE PEDESTRIAN EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSE SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCE AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ALL INTERNAL CABINET WIRING TO BE PERFORMED BY THE SIGNAL SHOP. THE CONTRACTOR SHALL DELIVER THE APS CENTRAL CONTROL UNIT TO THE SHOP FOR TESTING AND PROGRAMMING.
- THE CONTRACTOR SHALL REMOVE ALL UNUSED CABLE, AS WELL AS CAP AND ABANDON UN-USED EXISTING CONDUIT
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- ALL DETECTABLE WARNING SURFACES WILL BE INSTALLED ACCORDING TO MD STANDARD 855.40.
- FOR ADDITIONAL DESIGN DETAILS FOR PAVEMENT MARKINGS AND DIMENSIONS SEE SHEET 3.

TRAFFIC CONCEPTS, INC.

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FAX: (410) 923-6473
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APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
FILE PATH: 1809_pl.dgn
DATE: Friday, April 10, 2009

REVISIONS

NO.	DESCRIPTION	DATE
1	RECONSTRUCT SIGNAL W/APS	3-9-09
2	RELINE #1 REVISION TO GEOMETRIC IMPROVEMENTS IN THE SE CORNER LED TO TRAFFIC SIGNAL MODIFICATION 72503 CONTRACT NO. XX105535	3-9-09
3	GEOMETRIC IMPROVEMENTS TO THE ISLAND IN THE SOUTHEAST CORNER LED TO TRAFFIC SIGNAL MODIFICATION 72503 CONTRACT NO. XX105535	3-9-09

TRAFFIC SIGNAL PLAN

SCALE 1"=20'	DATE 4-25-03	CONTRACT NO.
DESIGNED BY	COUNTY	MONTGOMERY
DRAWN BY	LOGMILE	15009711.89
CHECKED BY	T.I.M.S. NO.	I-809
F.A.P. NO.	TOD NO.	
DRAWING NO. TS-1218H	SHEET NO. 1 OF 3	